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EXAMINER

JACOBS, LASHONDA T

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 09/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/363,949

Applicant(s)

FIELDS ET AL.

Examiner

LaShonda T Jacobs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: note reference number 14, page 9, line 7; reference number 18, page 9, line 10; reference number 28, page 11, line 12 and reference number 34, page 13, line 12. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: note reference 30 of Figure 1. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-6, 13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Weikart et al. (hereinafter, "Weikart", EP 0831409).

As per claim 1, 13 and 17, Weikart teaches a method and computer program product for extending the capabilities of a web server, comprising the steps of:

- sending a request from a client to the web server, the request including an address for the code module needed to service the request (see abstract, lines 4-6, pg. 2, lines 36-40, pg. 3, lines 34-56 and see Fig. 2);

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- if the code module is unavailable at the web server, having the web server use the address to request the code module from the publishing server (see pg. 4, lines 5-7);
- installing the code module at the server; and performing the request at the web server using the install code module (see pg. 4, lines 20-33).
- serving a response to the request back to the client (see pg. 3, lines 41-45).

As per claim 2, Weikart teaches the method of Claim 1 further including the step of:

- serving the code module from the publishing server to the web server (see pg. 4, lines 5-7 and lines 20-33).

As per claim 3, Weikart, teaches the method of Claim 1,

- wherein the address is a URL (see pg. 3, lines 35-36, lines 41-43 and lines 57-58; pg. 4, lines 1-4 and Fig. 2).

As per claim 5, Weikart teaches the method of Claim 1,

- wherein the code module is unavailable to the web server because the cannot access the code module (see pg. 3, lines 57-58 and pg. 4, lines 1-7).

As per claim 6, Weikart teaches the method of Claim 1,

- wherein the request includes a unique identifier for the code module (see pg. 4, lines 1-4 and Fig. 2).

4. Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Aggarwal et al. (hereinafter, "Aggarwal", 5,924,116).

As per claim 9, Aggarwal discloses a servlet that allows a client program to upload additional program code and execute the code within the server (col. 5, lines 13-22). Therefore,

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Aggarwal implicitly discloses during a given Web transaction, uploading a code module from the client to the web server; and at the web server, using the uploaded code module as needed to service a given request from the web client.

5. Claims 14, 16 and 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weikart in view of Lee et al. (hereinafter, "Lee", 6,167,522).

As per claims 14 and 18, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- the step of authenticating the code module prior to the installing step

However, the use and advantages of authenticating a code module is well known to one skilled in the relevant art at the time the invention was made as evidence by Lee (col. 2, lines 35-44, col. 3, lines 9-26 and lines 34-50 and col. 4, lines 1-43).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the step of authenticating a code module in Weikart's method enabling a server to determine if a code module has privileges to access specific resources base on the identifier/URL.

As per claim 16, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the step of authenticating includes applying a given key to information retrieved from the publishing server.

However, in an analogous art, Lee discloses:

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- wherein the step of authenticating includes applying a given key to information retrieved from the publishing server (col. 4, lines 14-36). Therefore, Lee implicitly discloses wherein the step of authenticating includes applying a given key to information retrieved from the publishing server.

Therefore, one of ordinary skill in the art would have found it obvious to implement and incorporate a verification procedure in Weikart's method enabling a server to have access privileges to resources in order to process a request of a client/user.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4, 7, 8, 15, 19, 23 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weikart in view of Gosling et al. (hereinafter, "Gosling", EP 0810524).

As per claim 4, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the code module is unavailable to the web server because the web server does not support the code module.

However, in an analogous art, Gosling discloses a servlet object that is not initially on the local server computer (see pg. 3, lines 25-30). Therefore, Gosling implicitly discloses wherein

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the code module is unavailable to web server because the web server does not support the code module.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a servlet object that is not initially on a server in Weikart's method enabling the server to retrieve the servlet object from another server in order to process the content of the request into the correct format.

As per claim 7, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the code module conforms to specific transformation API of the web server.

However, in an analogous art, Gosling discloses a web server that interacts with servlets through an application program interface (API) (see pg. 3, lines 13-17 and pg. 5, lines 18-42). Therefore, Gosling implicitly discloses wherein the code module conforms to specific transformation of the web server.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a web server that interacts with servlets through an API in Weikart's method providing an adequate means for dynamically generating information.

As per claim 8, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- having the publishing server sign the code module with a key;
- serving the sign code module from the publishing server to the web server; and
- verifying authenticity of the code module prior to the installing step.

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However, in an analogous art, Gosling discloses a security administrator that is used to determine if a servlet is authorized to respond to a given request (see pg. 4, lines 23-48).

Therefore, Gosling implicitly discloses having the publishing server sign the code module with a key; serving the sign code module from the publishing server to the web server; and verifying authenticity of the code module prior to the installing step.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a security administrator in Weikart's method allowing the server to obtain a code module and process the client/user request without any security problems.

As per claim 15, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the given location is a publishing server

However, in an analogous art, Gosling discloses a servlet that is uploaded by a local server computer from a remote server computer (see pg. 3, lines 25-30 and pg. 4, line 41). Therefore, Gosling implicitly discloses wherein the given location is a publishing server.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a remote server computer in Weikart's method enabling the server to retrieve the servlet object from a remote server to process the request in a timely and efficient manner.

As per claim 19, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- means for executing the code module to respond to the request



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However, the use and advantages of executing a code module to respond to a request is well known to one skilled in the relevant art at the time the invention was made as evidence by Gosling (see pg. 2, lines 30-35 and pg. 3, lines 13-19).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the step of executing a code module in Weikart's method enabling a client/user to received data in the desired format in a timely and efficient manner.

As per claim 23, Weikart teaches a web server operative in a computer network comprising,

- means responsive to receipt of a request from a client identifying a code module and an address for the code module (see abstract, lines 4-6, pg.2 lines 36-40, pg. 3, lines 34-56 and see Fig.2);
- means responsive to a determination that the code module is not available at the web server for using the address to request the code module for a given location in the computer network (see pg. 4, lines 5-7);
- means responsive to receipt of the code module from the given location for installing the code module at the web server for use in responding to the request (see pg. 4, lines 20-33).

However, Weikart fails to disclose:

- means for executing the code module to respond to the request.

However, the use and advantages of executing a code module to respond to a request is well known to one skilled in the relevant art at the time the invention was made as evidence by Gosling (see pg. 2, lines 30-35 and pg. 3, lines 13-19).

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Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the step of executing a code module in Weikart's method enabling a client/user to received data in the desired format in a timely and efficient manner.

As per claim 25, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the code module is written to conform to a server API.

However, in an analogous art, Gosling discloses a web server that interacts with servlets through an application program interface (API) (see pg. 3, lines 13-17 and pg. 5, lines 18-42). Therefore, Gosling implicitly discloses wherein the code module is written to conform to a server API.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a web server that interacts with servlets through an API in Weikart's method providing an adequate means for dynamically generating information.

As per claim 26, although Weikart shows substantial features of claimed invention (discussed above), it fails to disclose:

- wherein the code module is written in Java.

However, the use and advantages for writing servlets in Java is well known to one skilled in the relevant art at the time the invention was made as evidence by Gosling (see pg. 4, lines 50-53 and pg. 10, line 56).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate writing servlets in Java in Weikart's method providing adequate means for efficiently retrieving and sending data to a client.

As per claim 27, Weikart discloses an applet that is downloaded into the client computer and discard with the page (see pg. 3, lines 53-56 and pg. 4, lines 34-35). Therefore, Weikart implicitly discloses means for deleting a code module from the server upon a given occurrence.

As per claim 28, Weikart further discloses:

- a web client having means for identifying a code module required to process a client request (see abstract, lines 4-6, pg. 2, lines 36-40, pg. 3, lines 34-56 and see Fig. 2);
- a publishing server supporting the code module at a given URL (see pg. 4, lines 5-7); means responsive to receipt of a request from the web client identifying the code module and the URL for the code module (see abstract, lines 4-6, pg. 2, lines 36-40, pg. 3, lines 34-56 and see Fig. 2);
- means responsive to a determination that the code module is not available at the web server for using the URL to request the code module from the publishing server (see pg. 4, lines 5-7);
- means responsive to receipt of the code module from the publishing server for installing the code module (see pg. 4, lines 20-33).
- means operative during a web transaction for executing the code module to respond to the request (see pg. 3, lines 41-49, pg. 4, lines 4-7 and lines 20-33); and
- means for serving data back to the web client following processing by the code module (see pg. 4 lines 30-45).

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8. Claim 10, 11 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal in view of Weikart.

As per claims 10 and 29, although Aggarwal shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the web client is a pervasive computing client.

However, the use and advantages of using a pervasive computing client is well known to one skilled in the relevant art at the time the invention was made as evidence by Weikart (see pg. 3, lines 13-17).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate portable computers in Aggarwal's system providing adequate means for efficiently retrieving and sending data while in any given location.

As per claim 11, although Aggarwal shows substantial features of the claimed invention (discussed above), it fails to explicitly disclose:

- wherein the code module translates data into a given proprietary format and serves the translated data back to the pervasive computing client.

Weikart discloses a MIME "type" of plug-in extension required to process page 200 requested by the client (see pg. 3, lines 41-43 and lines 56-57, pg. 4, lines 1-7 and lines 20-33). Therefore, Weikart implicitly discloses wherein the code module translates data into a given proprietary format and serves the translated data back to the pervasive computing client.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a plug-in extension in Arggarwal's system enabling a client/user to received data in the desired format in a timely and efficient manner.

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9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal in view of Gosling.

As per claim 12, although Aggarwal shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the code module conforms to a given application programming interface (API)

However, Gosling discloses a web server that interacts with servlets through an application-programming interface (API) (see pg. 3, lines 13-17 and pg. 5, lines 18-42). Therefore, Gosling implicitly discloses wherein the code module conforms to a given application programming interface (API).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a web server that interacts with servlets through an API in Weikart's method providing an adequate means for dynamically generating information.

As per claim 16, although Weikart shows substantial features of the claimed invention (discussed above), it fails to disclose:

- wherein the step of authenticating includes applying a given key to information retrieved from the publishing server.

However, in an analogous art, Lee discloses:

- wherein the step of authenticating includes applying a given key to information retrieved from the publishing server (col. 4, lines 14-36). Therefore, Lee implicitly discloses wherein the step of authenticating includes applying a given key to information retrieved from the publishing server.

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Therefore, one of ordinary skill in the art would have found it obvious to implement and incorporate a verification procedure in Weikart's method enabling a server to have access privileges to resources in order to process a request of a client/user.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weikart in view of Aggarwal.

As per claim 20, Weikart discloses a computer program product in a computer usable medium operative in a web server, comprising:

- means responsive to receipt of a request from a client for identifying a code module required to process the request (see abstract, lines 4-6, pg. 2, lines 36-40, pg. 3, lines 34-56 and see Fig. 2);
- means responsive to a determination that the code module is not available at the web server (see pg. 4, lines 5-7); and
- means responsive to receipt of the code module from the client for installing the code module at the web server for use in responding to the request ( see pg. 4, lines 20-33).

However, Weikart fails to disclose:

- requesting the client to upload the code module

Aggarwal discloses a servlet that allows a client program to upload additional program code to the server (col. 5, lines 13-22). Therefore, Aggarwal implicitly discloses requesting the client to upload the code module.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a program that allows the client to upload

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additional program code to the server in Weikart's enabling the program to provide additional functionality on an as-needed basis.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weikart in view of Aggarwal and in further view of Lee.

As per claim 21, although Weikart and Aggarwal show substantial features of the claimed invention (discussed above), they fail to disclose:

- means for authenticating the code module

However, the use and advantages of authenticating a code module is well known to one skilled in the relevant art at the time the invention was made as evidence by Lee (col. 2, lines 35-44, col. 3, lines 9-26 and lines 34-50 and col. 4, lines 1-43).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the step of authenticating a code module in Weikart in view of Aggarwal method enabling a server to determine if a code module has privileges to access specific resources base on the identifier/URL.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weikart in view of Aggarwal and in further view of Gosling.

As per claim 22, although Weikart and Aggarwal show substantial features of the claimed invention (discussed above), they fail to disclose:

- means for executing the code module to respond to the request.

However, the use and advantages of executing a code module to respond to a request is well known to one skilled in the relevant art at the time the invention was made as evidence by Gosling (see pg. 2, lines 30-35 and pg. 3, lines 13-19).

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Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the step of executing a code module in Weikart in view of Aggarwal method enabling a client/user to received data in the desired format in a timely and efficient manner.

13. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weikart in view of Gosling and in further view of Lee.

As per claim 24, although Weikart and Gosling show substantial features of the claimed invention (discussed above), they fail to disclose:

- means for authenticating the code module

However, the use and advantages of authenticating a code module is well known to one skilled in the relevant art at the time the invention was made as evidence by Lee (col. 2, lines 35-44, col. 3, lines 9-26 and lines 34-50 and col. 4, lines 1-43).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the step of authenticating a code module in Weikart in view of Gosling method enabling a server to determine if a code module has privileges to access specific resources base on the identifier/URL.

### *Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,742,768 to Gennaro et al.

U.S. Patent No. 6,064,977 to Haverstock et al.

U.S. Patent No. 6,006,260 to Barrick Jr. et al.



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U.S. Patent No. 5,870,544 to Curtis

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T Jacobs whose telephone number is 703-305-7494.

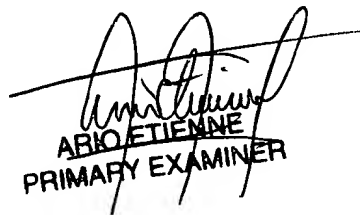
The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

LaShonda T Jacobs  
Examiner  
Art Unit 2157

ltj  
September 9, 2002

  
ARIO ETIENNE  
PRIMARY EXAMINER